The Cost of Production in 2005

California Dairy Industry, 2005

The 2005 calendar year began with a very wet winter. Southern California received twice the average annual rainfall. News footage portraying dairy cows in muddy conditions were transmitted throughout the state and nation. The Associated Press reported a 30% increase in cow mortality rates and a ten pound per cow daily decrease in milk production for the Southern California milk shed. Riverside and San Bernardino counties' dairy producers suffered nearly \$40 million in losses, according to the report. Despite these considerable losses, the state's milk supply was not significantly disrupted, due to the fact that less than 11% of the state's milk is produced in Southern California.

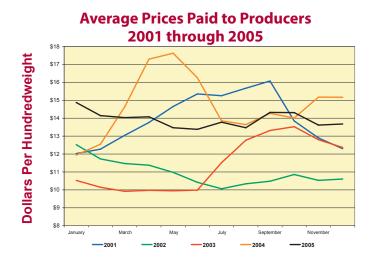
This wet weather also affected other commodity markets within the dairy sector. Rainy weather delayed hay production in many parts of the state during March. Dairy managers were concerned with the quality of hay forage that would be sold during the spring months. Reduced hay supplies coupled with constant demand from the livestock industry translated into higher prices for all hay producers and consumers. Hay that could have been



purchased in spot markets for \$165 per ton at the beginning of the year was being sold for nearly \$200 per ton by year's end. Better quality hay frequently sold for more than \$200 per ton throughout the year.

Livestock markets for replacement heifers, cull cows, and bull calves all sustained higher market prices. Industry specialists calculate that during 2005, a dairy farmer needed to sell 2.5-to-3 cull cows in order to generate enough income to purchase one replacement heifer. Purchase prices for replacement heifers remained high; \$2,000 to

\$2,500 per replacement heifer was not uncommon. Some replacement heifers sold for as much as \$3,000 at local livestock auctions.



By the summer months, environmental regulations were of primary concern for most dairy managers: air quality topped the list, followed by water quality. Most of these new and/or increased regulations primarily affected dairies located in the San Joaquin Valley. The San Joaquin Valley Air Pollution Control District determined that each dairy cow emits 19.3 pounds of volatile organic compounds on an annual basis. This determination meant that dairy cows are the largest air polluters in the valley. Much controversy arose over the method used to calculate the 19.3 discharge figure. Additional research was commissioned by the dairy industry, in an effort to arrive at a discharge figure that was scientifically based on actual conditions present on today's California dairy farms.

Environmental issues have slowed the construction of new dairies and the expansion of existing ones in California. The San Joaquin Valley Regional Water Control Board assessed all the dairy producers in their region for the permitting process. The assessment was based on the size of the dairy and was reduced by half if the dairy was certified in the Dairy Quality Assurance Program. The San Joaquin Valley Air Pollution Control

If you are a Grade A milk producer and are interested in participating in the Cost of Milk Production Survey that is administered by the Dairy Marketing Branch, please see the contact information on page 46.

The Cost of Production in 2005

District established 1,000 milking cows as the minimum size dairy that will have to comply with their new rules. The dairies with over 1,000 milk cows will have to implement the "Best Available Retrofit Control Technologies" as identified by the Air District. Most of the changes will be in management practices. Dairies that fall under the Air Districts rules will have to submit a permit application within six months of rule adoption. The rules are supposed to be adopted in June 2006.

Dairy Prices

The Federal Milk Income Loss Contract (MILC) program came to an end September 20, 2005, but was extended through September 30, 2007 at a lower rate (see MILC information box at right). In the summer of 2005, with both cow numbers and production per cow on the rise, the Cooperatives Working Together (CWT) program tried to impact the surging increase in milk production across the U.S. with another round of herd retirements and continued acceptance of dairy product export bids. Across the U.S., the lastest round of the herd retirement program removed 64,050 cows to yield an estimated 1.2 billion pound annual reduction in milk production. In the first two years of export activities, CWT helped move more than 10 million pounds of cheese out of the domestic market. The goal is to export a volume of cheese and butter that represents nearly one billion pounds of milk equivalent on a butterfat basis.

The 12-month average growth in milk production for 2005 was 3.0 percent, with the last five years averaging an overall 3.1 percent milk production growth. The 12-month average price paid to producers was \$13.93 (low: \$13.38, high: \$14.87) per hundredweight, down five percent from the average prices paid to producers in 2004. Inconsistent consumer demand, strong world prices, and continued lack of surplus dairy products all contributed to volatile commodity prices, not necessarily causing large spikes or

dips in prices, but influencing up and down prices on a daily basis. By early 2006, the steady increase in milk production throughout 2005 was creating more milk

MILC Payment Rate

When the Boston Class I milk price falls below \$16.94, MILC payments will be made.

The Farm Service Agency (FSA) determines the per hundredweight payment rate for the applicable month by subtracting the Boston Class I price for the month from the \$16.94 baseline, and multiplying the difference by 34 percent (34 percent is the applicable rate for the period October 1, 2005 through August 31, 2007)

Example:

Boston Class I price for February 2006: \$16.63 \$16.94-\$16.63 = \$0.31 \$0.31 x 34% = \$0.105400 Payment rate for February 2006: \$.01054

FSA posts monthly MILC payment rates online at: http://www.fsa.usda.gov/dafp/psd/MILC.htm

on the market than demand for dairy products, and commodity prices began to decline. Energy availability was plentiful, but in most instances more costly; fuel costs soared after Hurricane Katrina and are now lower

but remain volatile; and environmental concerns continue to affect both dairy producers and processors. In addition, USDA held a hearing in early 2006 focusing on changes to the make allowances in their Class III (cheese) and IV (butter, powder) pricing formulas. Changes in these allowances will also affect the federal Class I and II prices. Changes in the federal pricing formula allowances will affect the competitiveness of California milk and dairy products prices. All of these factors will continue to play a major role in the California dairy industry in 2006.

World Outlook

A low U.S. dollar encouraged exports of dairy products into world markets during 2004. During 2005, the U.S. dollar strengthened in value. Although a stronger dollar made U.S. products relatively more expensive on the world market, dry milk products continued to be in high demand. Standardized and value-added dry milk products were of particular interest to foreign importers.

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The California Weighted Average Price (for dry milk products) increased from \$0.87 per pound at the beginning of the year to nearly \$1.00 per pound by the end of 2005. With these higher market prices, California's and the nation's dry milk product producers did not rely on the Commodity Credit Corporation to purchase their products.

Hearings

In early February, the Department held a public hearing to consider changes to the economic pricing formulas for milk used to make Class 4a and 4b products. The hearing focused on adjustments to manufacturing cost allowances, f.o.b. California price adjusters, and the whey pricing component in the Class 4b formula. The hearing decision brought about a number of changes to the Class 4a and 4b formulas.

A second hearing was held to consider the Class 1 (milk used for fluid purposes) economic pricing formula. This hearing brought forth much discussion on the similarities and differences between California's Class 1 price and the Class I price paid to producers regulated by the federal milk marketing orders. No changes to the California Class 1 pricing formula were made as a result of this hearing.

In January 2006, the Department held a public hearing to consider amendments regarding changes to the milk movement incentive system. The hearing decision resulted in changes in the transportation allowance rates in three Northern California receiving areas and two Southern California receiving areas. There were also changes made to the transportation credit rate in Los Angeles County and the Southern San Joaquin Valley.





The Department has called a hearing to be held June 1, 2006 to consider changes to the Class 2, 3, 4a, and 4b pricing formulas.

Recap of 2005

In retrospect, 2005 was a good year for the state's dairy industry. Relative to costs, prices for milk, cull cows, and bull calves all remained at higher levels. Most dairy managers maintained profitable operations during the entire year. Dairy processors secured sales agreements on the open market without needing to sell to the Commodity Credit Corporation (CCC) at support purchase prices. 2005 is the first year the CCC has not purchased dairy products since the program began in 1949. California dairy products continued to meet consumer demand in not only domestic but foreign markets as well.

California Cost of Producing Milk

Higher feed, fuel and herd replacement costs led the way in 2005 resulting in costs increasing 5.4 percent since 2004 and eight percent since 2003. Fuel prices had an affect on all areas of cost. Fuel surcharges were added to almost everything that is hauled on and off a dairy. While feed prices increased in all areas, the big issue of the year was alfalfa hay. High quality alfalfa hay was in short supply reflected by price increases of 14.6 percent. Herd replacement costs increased by 11.8 percent. In addition, the cost of borrowing money also saw an upward trend.